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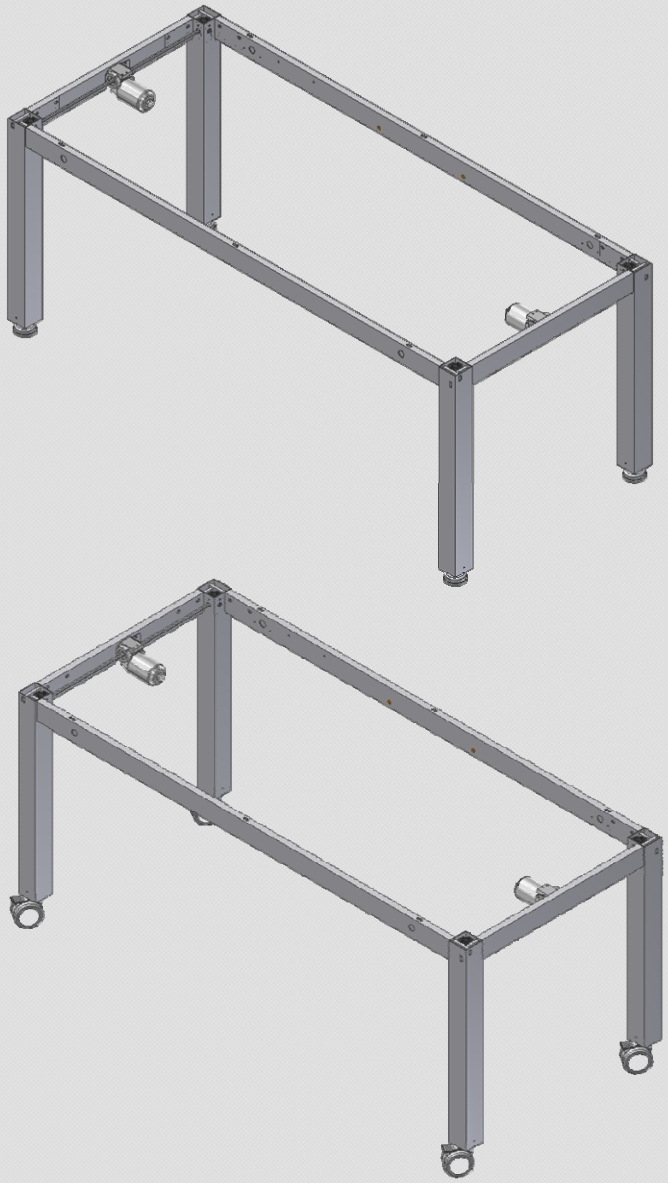
CE



4SingleElectric

User Manual

Mounting Instructions

Keep this folder with product at all times!

PDF 6004 / 01.08.2009

Contents

1. INTRODUCTION 3

2. CONFORMITY WITH EU-DIRECTIVES 3

3. APPLICATION 3

4. TECHNICAL DATA 4

5. SCHEMATIC DIAGRAM OF FRAME 5

5. SCHEMATIC DIAGRAM OF FRAME 5

1. MOTOR 96000553 2 6

6. MOUNTING INSTRUCTIONS, DESCRIPTION 7

6.1 Assembly of frame 7
6.2 Mounting of safety strip 8
6.3 Mounting of wheels (option) 9
6.4 Mounting of fixed control switch (option) 9
6.5 Performance test 9

7. LIST OF COMPONENTS 10

8. OPTIONS 11

9. SAFETY IN USE 12

10. CLEANING/MAINTENANCE 13

10.1 Cleaning of frame 13
10.2 Maintenance 13
10.3 Service schedule, operation and maintenance 14

11. TROUBLE SHOOTING 14

11.1 The frame seems loose or unstable 14
11.2 The height of the frame cannot be adjusted (adjustment seems very difficult) 14
11.3 The frame does not move straight 14

12. CE-DECLARATION 15

13. COMPLAINTS 15

1. Introduction

4Single is a multi-function table, which may be adjusted electrically to suit seated or standing activities. Owing to the unique design there are a variety of applications and the table is therefore also ideal for wheelchair users.

This document must ALWAYS accompany the product and be read by and available to users.

All users must follow these instructions. It is very important that the instructions have been read and understood prior to operation of the product.

The instructions should always be available to the user and must accompany the product in case of relocation.

Correct use, operation and inspection are decisive factors for efficient and safe performance.

This product is electrically adjustable in height, which means that there is a risk of trapping. The operation must therefore be made or supervised by an adult, who has read and understood the importance of section 9 “Safety in use”.

The frame is provided with an infrared remote control, which must always be kept out of reach of children.

2. Conformity with EU-Directives

This product has CE-marking and meets the safety requirements of the Machinery, EMC and Low Voltage Directives. See separate CE Declaration, section 12.

If the table frame is assembled with or is an integral part of other electrical components it will be considered a new unit. Therefore, the assembled product must be subjected to a risk assessment to obtain CE-marking.

3. Application

4Single is designed to obtain optimum working height for the user. It is an activity table and should therefore not be used as a lifting table or person lifter.

The product must be used indoor, under normal room temperatures and humidity as stated in section 4. 4Single is not designed for use in damp rooms.

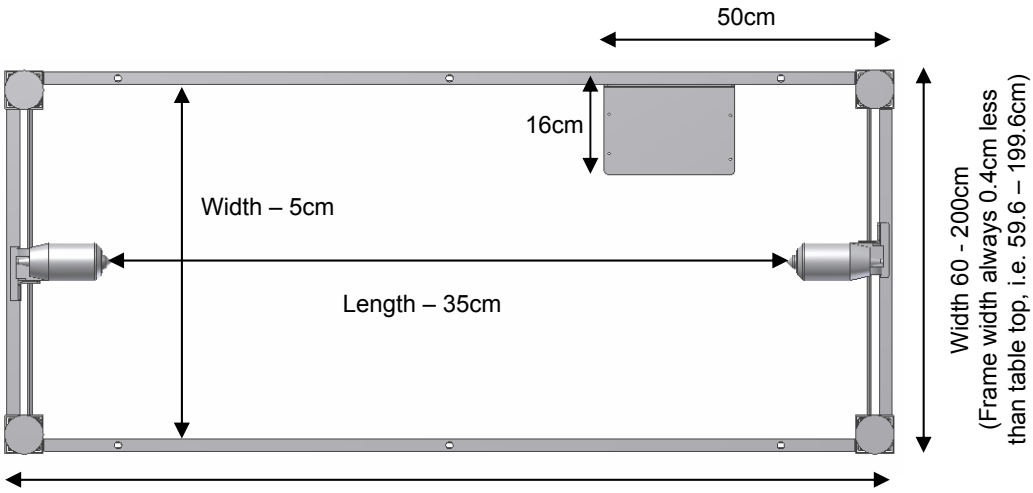
The control unit has IP32/II protection and must always be installed in accordance with the Danish Heavy Current Regulations or corresponding national or international standards.

4. Technical data

Product name:	**4SingleElectric**
Item number:	**Set of legs, Electric**
	Height 55-85 cm H1 50-41120
	Height 65-95 cm H2 50-41220
	Front fascias for frame L = xxx cm 50-43xxx From 60-200cm at increments of 1cm
	Side fascias for frame W = xxx cm 50-45xxx From 60-200cm at increments of 1cm
Options:	Wheels: Increase the table height by 7.5cm
	Flexible safety strip
Material:	Welded steel tubes St. 37 and various plastic components
Surface treatment:	Blue chromate, powder coating: Standard CWS 81283 RAL 7021 mat
Power supply:	230VAC / 2.5A / 50Hz
Standby primary:	1.1W
Control voltage:	24VDC
Duty circle:	Max. 10% conform to 1 min. active / 9 min. pause
Max. load of frame:	130kg evenly distributed
Speed/lifting time:	Approx. 32 $^{mm}/_{sec.}$ – approx. 10sec.
Increased load of frame:	250 kg evenly distributed (option)
Speed/lifting time:	Approx. 12 $^{mm}/_{sec.}$ - approx. 25sec.
Temperature:	5-45°C
Air humidity:	5-85% (non-condensing)
Complaints:	See Complaints, page 15
Producer:	Ropox A/S, DK-4700 Naestved, Tel.: +45 55 75 05 00 e-mail: info@ropox.dk - www.ropox.com

5. Schematic diagram of frame

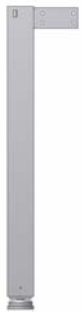
All electrical connections to the control unit must be flexible to ensure that the table moves freely within the range of adjustment.



For table top length 60 - 200cm
(Frame length always 0.4cm less than the table top, i.e. 59.6 – 199.6cm)

Height: 55-85cm (H1)

Height: 65-95cm H2)



Height w. wheels: + 7,5cm

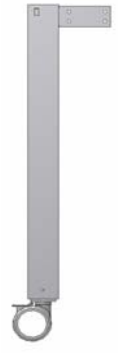


Table size:
60cm < L ≤ 120cm
60cm < W ≤ 120cm

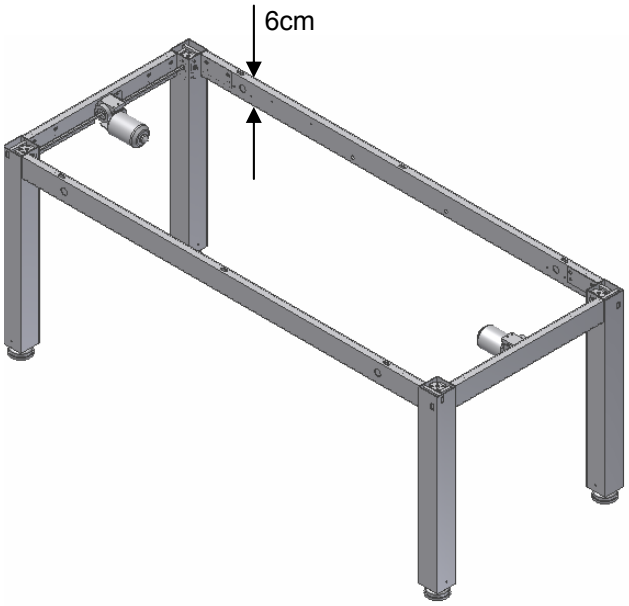
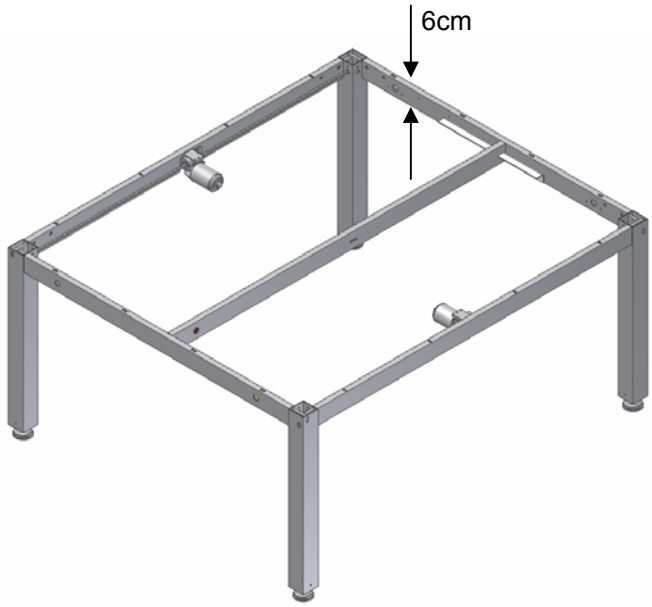
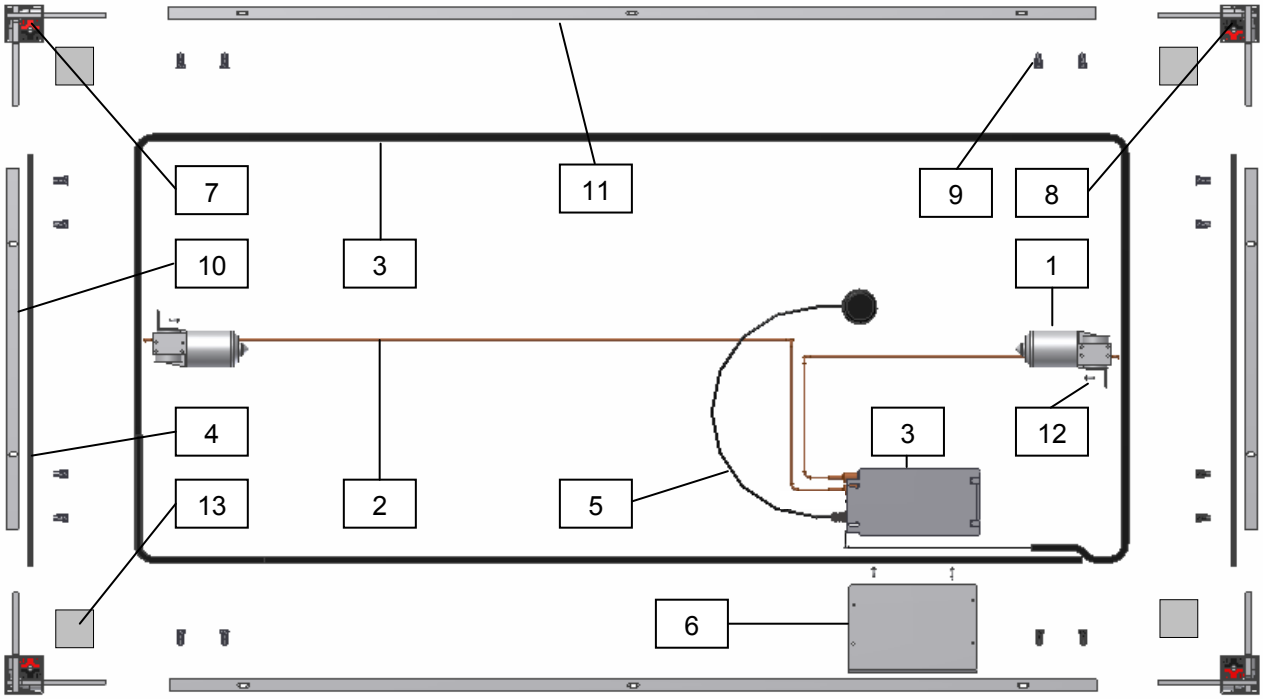
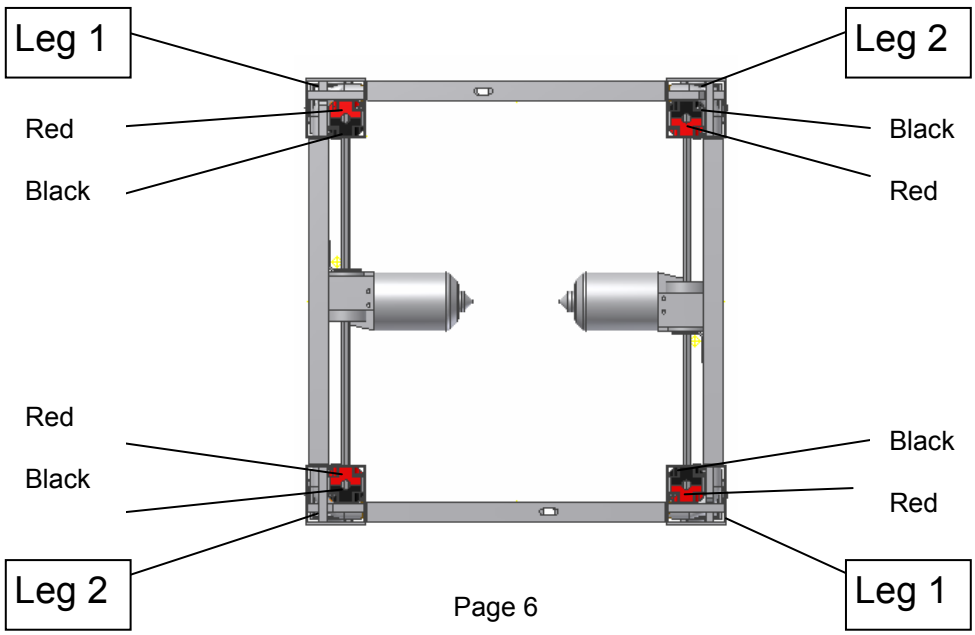


Table size:
121cm < L < 200cm
121cm < W < 200cm





Component		Item number	Pcs.
1.	Motor	96000553	2
2.	Motor cable 2m	96000573	2
3.	Control unit	96000563	1
4.	Side fascia shaft, Hex6. Length = frame width – 13.8cm		2
5.	Infrared control switch Ropox 1 function	96000661	1
6.	Angle plate for control unit	*12978802-29	1
7.	Leg 1		2
8.	Leg 2		2
9.	Allen screw M8x16	95010003	16
10.	Side fascia profile Length = frame width – 12.4cm		2
11.	Front fascia profile Length = frame length – 12.4cm		2
12.	Screw ø4.8x13, Torx	95091012	6
13.	Cover plates	50*40000-025	4



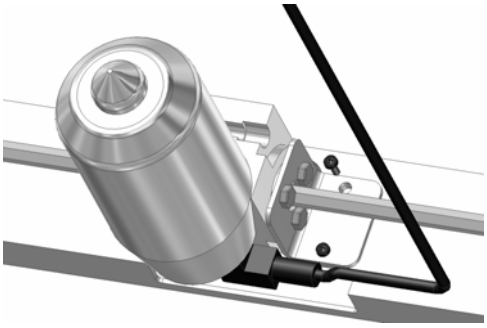
6. Mounting instructions, description

⚠ Mounting must always be carried out by competent personnel.

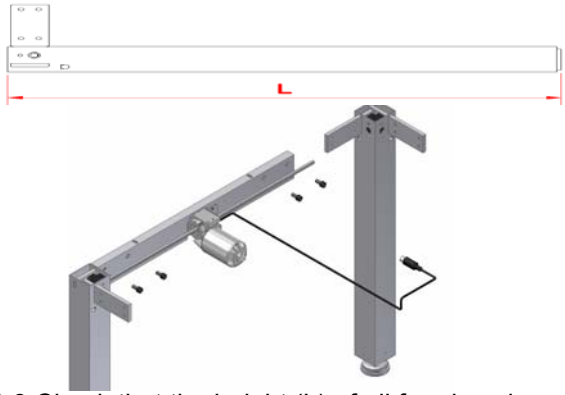
Prior to mounting, check that all parts have been provided. See list of components, section 7.

6.1 Assembly of frame

6.1.1 Mount hexagonal shaft and motor cable.



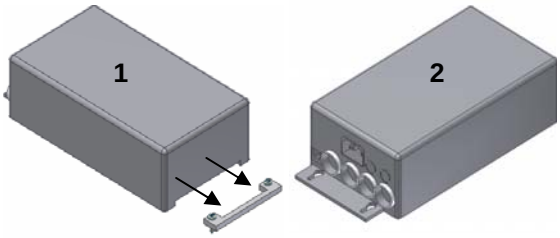
6.1.2 Mount motor on side fascia. Free cut of profile away from table top.



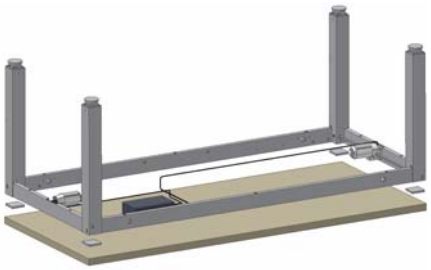
6.1.3 Check that the height (L) of all four legs is identical. May be adjusted on hexagonal shaft by means of the open-end wrench provided. Place side fascias on a plane surface and mount legs. See label on legs.

6.1.4 Now mount the two front fascias. Important: Push side and front fascias firmly against the leg before retightening the fascias. Tighten the bolts securely by means of the wrench provided.

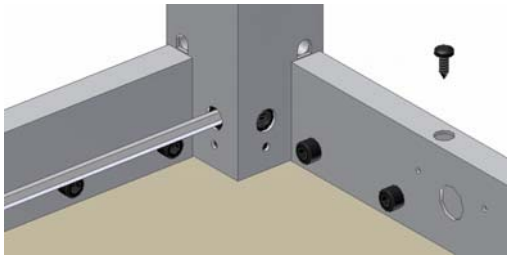
6.1.5 Position the angle plate for control unit as shown and fasten it to front fascia.



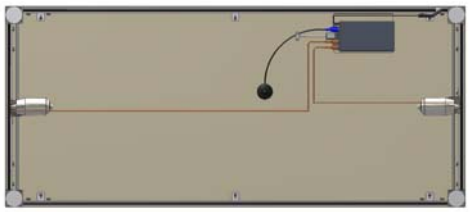
6.1.6 (1) Push the control unit over the fixture and (2) fasten it.



6.1.7 Place the frame on the table top and push the cover plates between legs and table top. Centre the frame in relation to the table top.

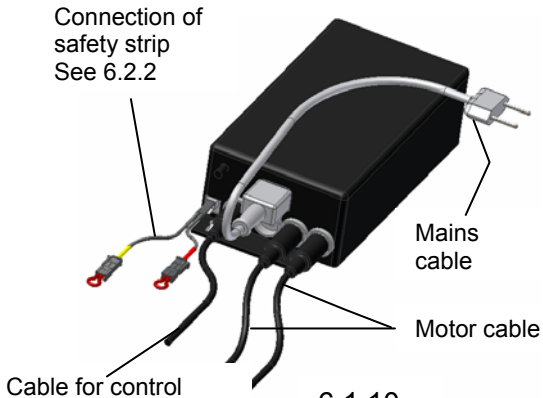


6.1.8 Fasten the tabletop with screws through the holes of the fascias.



6.1.9 Connect the infrared receiver to the control unit. Remove the protection paper and fit the receiver under the table top. Place loose cables in the cable clips and fasten them under the table top.

Connection to control unit



6.1.10

6.2 Mounting of safety strip

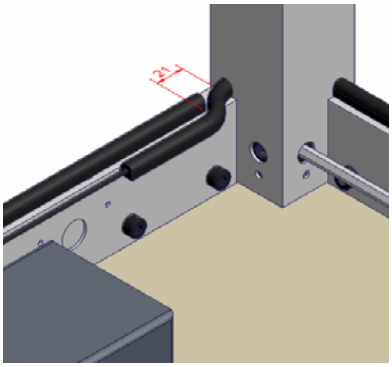
Option: Ropox always recommends the use of safety strips on electrically adjustable frames.

See the manual for strips provided.

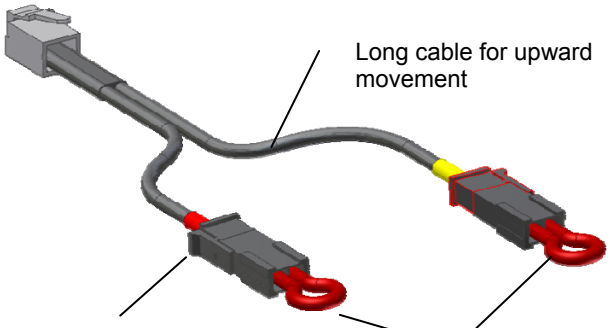
Be careful not to damage the safety strip during transportation or mounting.

If the safety strip is bent or twisted too much it may not have the intended effect.

In order to obtain optimum adhesion the surface on which the safety strip is to be attached must be clean and dry.



6.2.1 Push the safety strip through all four legs and fit it on the underside of the fascia by means of the double-adhesive tape provided.
Remove the protection paper of the tape and press on the safety strip. Observe the minimum bending radius (2cm inside)
See separate instructions for mounting and handling of the safety strip.



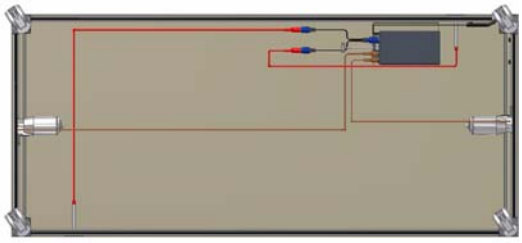
6.2.2 Remove the red short circuit plug of the short cable (marked in red).

Insert the loose cable of the safety strip into the free socket of the control unit (cable marked in red).

6.3 Mounting of wheels (option)

6.3.1 Mount the wheels. Do not forget to fit three washers on each wheel.

6.4 Mounting of fixed control switch (option)



6.4.1 Pull the cable through the front fascia and insert it into the control unit.

6.5 Performance test

After mounting and prior to use all functions of the table must be tested. After that a performance test must be carried out at least once a year by competent personnel:

Testing prior to switching on power:

1. Check that the mounting instructions have been observed.
2. Check that all bolts have been tightened.
3. Check that all cables have been connected correctly and that the plugs have been pressed home.
4. There must be no load on the table.
5. There must be no objects or the like preventing the table from moving freely within the range of height adjustment.

Now switch on power to the control unit:

6. Press the DOWN button and adjust the table to bottom position. Press the DOWN button again and keep it pressed for another 5sec. to reset the control unit. Check that the movement is smooth and even. Make sure that the mains cable moves freely.
7. Now press the UP button and adjust the table to top position. Check that the movement is smooth and even. Make sure that the mains cable moves freely.
8. If a safety strip has been mounted under the tabletop it must be tested:
   Press the DOWN button and let the table move 2-5cm downward while activating the safety strip. The table must now stop the downward movement, move1-2cm upward and stop.

When all these tests have been carried out the table is ready for use.
See ”Safety in use, section 9”.

7. List of components

Set of legs H1, 50-41120: 1 set

Set of legs H2, 50-41220: 1 set

Front fascias for L=xxx cm, 50-43xxx: 1 set

Side fascias for W=xxx cm, 50-45xxx: 1 set

Control unit (21,2x10,5x6,0cm) 50-41500: 1 pc.
230VAC, incl. mains cable (300cm)

Contained in control unit:

Infrared control 30-67847: 1pc.
Remote control via infrared receiver (cable 250cm)
Operational range 150-200cm

98002014 Y-cable for safety stop: 1 pc.
98002013 End plug with resistance: 2 pcs.

Adhesive plate 96000155: 5 pcs.

Strips black 96000165: 5 pcs.

Angle plate for control unit *12978802-29: 1 pc.

Motor 96000553: 2 pcs.

Motor cable 96000573: 2 pcs.

Allen screw M8x16 95010003: 16 pcs.

Screw ø4.8x13 95091012: 6 pcs.

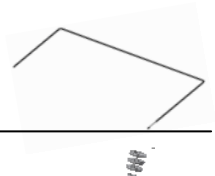
Screw ø4.2x6.5 95090806: 2 pcs.

8. Options

Split cable for control switch 96000629: 1 pc.
To be used if more than one control switch is required

Control switch, small press pad (6 x 3cm) 30-67840: 1 pc.

Safety strip 30-69xxx: 1 pc.



Brake wheels, black (4 wheels) 50-41600:
Increase the table height by 7.5cm 1 set
incl. 12 washers (95170510)

Increased lifting power, set of legs H1, 50-41320:
Max. load 250kg evenly distributed 1 set
(To be ordered with main order)

Increased lifting power, set of legs H2, 50-41420:
Max. load 250kg evenly distributed 1 set
(To be ordered with main order)

9. Safety in use

- 4Single must only be used by persons, who have read and understood these instructions.
- The frame is provided with an infrared remote control, which must always be kept out of reach of children.
- 4Single is an electrically operated height-adjustable table and we recommend the use of a safety strip in order to prevent damage and accidents. However, even if this strip has been fitted, always make sure that there are no persons, animals or objects under the table during use.
- 4Single is an activity table and should not be used as a lifting table or person lifter.
- Always use the table in a manner excluding the risk of damage to persons or property. The person operating the table is responsible for avoiding damage or injury.
- Children or persons with reduced observation capability should only operate the table when supervised.
- If the table is used in publicly accessible locations where children or persons with reduced observation capability may get near the table, the person operating the table must pay attention to those present in order to prevent dangerous situations.
- Make sure that there is free space above and below the table to allow height adjustment.
- Do not operate the table in case of defects or damage.
- Do not overload the table and make sure that the load distribution is correct.
- Do not use the table in an explosive environment.
- In connection with inspections, service or repairs always remove loads from the table.
- When installing power or water connections, the regulations of the national authorities must be observed.
- Modifications, which may influence the operation or construction of the table, are not allowed.
- Installation, service and repairs must be carried out by competent personnel.
- If the table has not been assembled according to these mounting instructions the right to complain may become void.
- Only use Ropox original spare parts as replacement parts. If other spare parts are used, the right to complain may become void.

10. Cleaning/maintenance

10.1 Cleaning of frame

WARNING
The frame must NOT be connected to mains voltage during cleaning. Do NOT flush electrical components with water.

Clean the frame with a wrung cloth with lukewarm water and a mild detergent. Do not use enchants or abrasives or grinding cloths, brushes or sponges

Dry the frame after cleaning.

10.2 Maintenance

Inspections, service and repairs must be carried out by competent personnel.

The frame is maintenance-free and the moving parts have been lubricated for life. For reasons of safety and reliability we recommend inspection of the frame once a year:

- Check that all bolts have been tightened.
- Check that the table moves freely and without problems from bottom to top position.
- **Resetting of frame:** Press the DOWN button and adjust the frame to bottom position. Press the DOWN button again and keep it depressed for 5 sec. to reset the control unit. Check that the movement is smooth and even. Make sure that the mains cable moves freely.
- Check that water connection hoses and draining hoses, if available, are tight and functional.
- Check that cable to hotplate, if available, is undamaged and may move freely.
- Check that all cables have been mounted correctly and are undamaged.

After each inspection, fill in the service schedule. See 10.3

Only use Ropox original spare parts for replacement of parts. If other spare parts are used, the right to complain may become void.

10.3 Service schedule, operation and maintenance

Service and maintenance Serial No.	Service and maintenance Serial No.
Date:	**Date:**
Signature:	**Signature:**
Remarks:	**Remarks:**
Service and maintenance Serial No.	**Service and maintenance Serial No.**
Date:	**Dato:**
Signature:	**Signature:**
Remarks:	**Remarks:**

11. Trouble shooting

11.1 The frame seems loose or unstable

- The screws assembling the frame have not been securely tightened.
- Tighten all screws, cf. mounting instructions.

11.2 The height of the frame cannot be adjusted (adjustment seems very difficult)

- Check mains voltage to control unit and that the power has been switched on.
- Check cables and plug-in connections between control unit and motors.
- Check cable and plug-in connection between control unit and control switch.
- Check connection of cables for safety strip to control unit and safety strip.
  (If no safety strip has been fitted, there must be a short-circuit plug on the safety strip cable. See mounting instructions fig. 6.2.2).
- <u>If a safety strip has been fitted:</u>
  Check that the safety strip has not been activated.
  Remove the short-circuit plug from the safety strip to the Y-cable of the control unit. See mounting instructions fig. 6.2.2). If the table works without connection of the safety strip, the safety strip has been activated.

11.3 The frame does not move straight

- If the frame does not move straight, it must be **reset**, see Maintenance, section 10.2

If there has been a power failure, the table must always be reset before use.

12. CE-Declaration

Product name:	**4SingleElectric**	
Item number:	**Set of legs, Electric**	
	Height 58-88 cm, H1	50-41120
	Height 65-95 cm, H2	50-41220
	Front fascias for frame L = xxx cm	50-43xxx
	Side fascias for frame W = xxx cm	50-45xxx

The above items conform to the following Directives and Standards:

DIRECTIVES

EU Council Directive No. 89/392/EEC concerning Machinery, modified by Directive No. 98/37/EC

The Executive Order of the Danish Working Environment Service No. 561 of 24 June 1994 with subsequent modifications

73/23/EEC, The Low Voltage Directive, modified by Directive No. 93/68/EEC

89/336/EEC, The EMC-Directive modified by Directives Nos. 92/31/EEC and 93/68/EEC

STANDARDS

DS/EN ISO	12001-1:	2003	DS/EN	55014-1:	2000
DS/EN ISO	12100-2:	2003	DS/EN	55014-2:	1997
DS/EN	527-2:	2002	DS/EN	60335-1:	2002

DS/EN	61000-6-3:2001, EN 55022 Class B
DS/EN	61000-3-2:2001, EN 61000-3-3:1995, A1:2001
DS/EN	61000-6-2:2001, EN 61000-4-2, -3, -4, -5, -6, -8, -11.

The original Declaration of Conformity is obtainable from Ropox A/S.

13. Complaints

See General Terms of Sale and Delivery on www.ropox.com

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